

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1-21. (Cancelled).

22. (New) A method of mixing a plurality of components, comprising:

- a) introducing components into a mixing vessel;
- b) mixing said components by rotating or oscillating the mixing vessel; and
- c) using a monitor to non-invasively monitor the contents of the vessel during said mixing, said monitor collecting spectroscopic data, wherein said monitor rotates or oscillates with the mixing vessel.

23. (New) The method of Claim 22, wherein said mixing vessel has an axis of symmetry about which it is substantially symmetrical; and said mixing vessel is rotated or oscillated about an axis that extends obliquely relative to said axis of symmetry.

24. (New) The method of Claim 23, in which the vessel comprises an Intermediate Bulk Container (IBC).

25. (New) The method of Claim 23, wherein said vessel is an Intermediate Bulk Container.

26. (New) The method of Claim 22, further comprising generating at least one signal indicative of the state of the contents of the vessel during mixing and modifying said mixing in response to at least one signal.

27. (New) The method of Claim 26, wherein said modification comprises discontinuing rotation or oscillation of the vessel.

28. (New) A method of mixing a plurality of components, comprising:
- a) introducing components into a mixing vessel;
 - b) mixing said components by rotating or oscillating the mixing vessel;
 - c) non-invasively monitoring the contents of the vessel during said mixing with a monitor that collects spectroscopic data, and
 - d) storing said spectroscopic data on a data storage device, wherein said data storage device is mounted on said oscillating or rotating mixing vessel.
29. (New) The method of Claim 28, further comprising transferring said data from the data storage device to a data acquisition device after rotation or oscillation of the vessel has been discontinued.
30. (New) The method of Claim 29, wherein, after rotation or oscillation of the vessel has been discontinued, the monitor is physically relocated to and docked with the data acquisition device.
31. (New) The method of Claim 22, including transferring the data from the monitor to an off-board data storage or a data acquisition device during the mixing process.
32. (New) The method of Claim 22, wherein said components include at least one pharmaceutical component.
33. (New) The method of Claim 22, wherein said components include at least one lubricant.
34. (New) The method of Claim 22, wherein said monitor comprises an acoustic optic tunable filter to produce, from a broad band radiation source, radiation at a wide range of different wavelengths and/or within different bands.

35. (New) An apparatus for mixing a plurality of components, comprising:
- a) a vessel for receiving the components,
 - b) a drive means for rotating or oscillating the vessel about an axis to effect mixing of the components within the vessel; and
 - c) at least one spectroscopic monitor connected to the vessel for rotation or oscillation therewith, wherein said monitor is capable of obtaining data for a spectroscopic profile as mixing proceeds.
36. (New) The apparatus of Claim 35, further comprising an output signal to indicate that the mixing process has reached a pre-set limit where modification of the process is necessary.
37. (New) The apparatus of Claim 36, further comprising a control device responsive to said output signal for controlling the mixing process.
38. (New) The apparatus of Claim 37, wherein said pre-set limit is a predetermined condition derived from the spectroscopic profile.
39. (New) The apparatus of Claim 38, wherein in said predetermined condition is when the scanned profiles attain or converge towards a substantially static state.
40. (New) The apparatus of Claim 37, wherein said control of the mixing process includes terminating the mixing process.
41. (New) The apparatus of Claim 35, further comprising at least one visual or audible signal indicating a condition of the mixing.
42. (New) The apparatus of Claim 35, further comprising a comparison device for comparing the spectroscopic profile obtained by the monitor to a target profile.
43. (New) The apparatus of Claim 42, wherein the comparison device is separate from the monitor and the vessel.

44. (New) The apparatus of Claim 35, wherein the monitor is self-powered.
45. (New) The apparatus of Claim 35, wherein the monitor includes a data storage device for collecting data for transfer, during or, upon completion of a mixing cycle, to allow a record to be maintained of each mixing cycle.
46. (New) The apparatus of Claim 35, further including a signal transmitter mounted for movement with the vessel for transmitting data to a remote receiver.
47. (New) The apparatus of Claim 35, wherein the monitor is arranged to repeatedly collect data during each cycle of rotation or oscillation of the vessel.
48. (New) The apparatus of Claim 35, wherein the monitor is arranged to collect data substantially continuously throughout each cycle of rotation or oscillation of the vessel.
49. (New) The apparatus of Claim 35, further comprising a sensor to determine the angular position of the vessel with respect to a datum position.
50. (New) The apparatus of Claim 35, wherein data is collected by the monitor in dependence upon the rotational or angular position of the vessel with respect to the datum position.
51. (New) The apparatus of Claim 35, wherein the monitor emits radiation used for monitoring, and at least a portion of the vessel is substantially transparent to at least part of said radiation.
52. (New) The apparatus of Claim 51, wherein said portion of the vessel is transparent to the radiation emitted from the monitor.
53. (New) The apparatus of Claim 35, wherein the monitor is a self-contained unit releasably connected to the vessel.

54. (New) The apparatus of Claim 53, wherein the monitor is self-powered.
55. (New) The apparatus of Claim 54, wherein the self-contained unit comprises:
 - a) a monitor;
 - b) a radiative signal transmitter; and
 - c) a compartment for reception of a battery for powering the unit.
56. (New) The apparatus of Claim 55, wherein the self-contained unit is adapted for docking at a location in registry with the window through which spectroscopic data is obtained.
57. (New) The apparatus of Claim 54, wherein the self-contained unit further comprises a data storage device comprising a microprocessor or computer forming part of the unit.
58. (New) The apparatus of Claim 54, wherein the self-contained unit further comprises a profile-comparison device comprising a microprocessor or computer forming part of the unit.
59. (New) The apparatus of Claim 35, further comprising a data acquisition device for collecting scanning-derived data from the monitor.
60. (New) The apparatus of Claim 59, wherein the data acquisition device includes a docking station for receiving the monitor.
61. (New) The apparatus of Claim 35, further comprises a transmitter and remote receiver for use in controlling the mixing process or for use in transferring data from the monitor to a data acquisition device.
62. (New) The apparatus of Claim 35, wherein the mixing vessel is a V-blender.
63. (New) The apparatus of Claim 35, wherein the mixing vessel is an Intermediate Bulk Container (IBC).

64. (New) The apparatus of Claim 35, wherein the monitor includes a near infra-red spectroscopic unit having a solid state tunable filter.
65. (New) An apparatus for mixing a plurality of components, comprising:
- a) a mixer;
 - b) at least one spectroscopic monitor for repeatedly scanning the contents of the mixer to obtain and record data for use in monitoring changes in the spectroscopic profile; wherein the monitor is a portable unit adapted for detachable mounting on a wall of the mixer that, on completion of the mixing cycle, the monitor can be dismounted and transported to the docking station
 - c) a control device in communication with said at least one spectroscopic monitor to control mixing; and
 - d) a docking station for receiving said monitor and allowing transfer of data from the monitor to a data acquisition device.
66. (New) The apparatus of Claim 65, wherein the mixer comprises at least one guide rail for mounting the portable unit in a desired position.
67. (New) The apparatus of Claim 65, wherein the control device is provided with at least one handle.